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**SPECIFICATION****LOADING HOOK FOR COMERCIAL GOODS****5 BACKGROUND OF THE INVENTION**

This invention relates to a loading hook for commercial goods used in department stores, supermarkets, etc.

The conventional loading hook for commercial goods includes a hooked rod for hanging goods forwardly and in order to display and arrange goods in an attachment bar, a  
10 lattice, etc. for goods exhibition in the department store, supermarket etc., the tip part of the loading hook is bent a little upwards in order to hook and take out goods easily.

Since the metal rod of the conventional loading hook for commercial goods projects, it had a possibility of damaging an eye etc. when the purchase visitors and visitors close their faces in order to confirm goods hung by the metal rod, and they contact to the metal  
15 rod with their arms and legs. Therefore, it is possible to be injured.

Accordingly, it is an object of the present invention to provide a loading hook for commercial goods which can be efficiently prevented to injure the purchase visitors and visitors when they are shopping, walking and the like, at the same time it can be easily hooked and taken out goods.

20 The novel features which are believed to be characteristic of the invention, both as to its organization and method of operation, together with further objects and advantages thereof, are described below with reference to the accompanying drawings in which a presently preferred embodiment of the invention is illustrated as an example.

It is to be expressly understood, however, that the drawings are for the purpose of  
25 illustration and description only, and are not intended as a definition

## **DISCLOSURE OF THE INVENTION**

Accordingly, a loading hook for commercial goods including an attachment piece attached to the goods exhibition implement and a support rod and/or a hook rod which are attached to the attachment piece, includes a buffer member which includes an attachment  
5 part which is attached detachably to the support rod; and a buffer body which is provided an end part of the attachment part, having a buffer part so that a tip part of the hook rod is covered.

## **BRIEF DESCRIPTION OF THE DRAWINGS**

10 FIG. 1 is a perspective view showing a first embodiment of the present invention in use;

FIG. 2 is a side view showing the first embodiment of the present invention;

FIG. 3 is a front view showing the first embodiment of the present invention;

FIG. 4 is a plan view showing the first embodiment of the present invention;

15 FIG. 5 is a cross sectional view taken along the line 5 – 5 of Fig. 5 showing the first embodiment of the present invention;

FIG. 6 is an expanded cross sectional view taken through line 6 – 6 of FIG. 2 showing the first embodiment of the present invention;

FIG. 7 is an explanation view showing a first embodiment of the present invention  
20 in use;

FIG. 8 is a side view showing a second embodiment of the present invention;

FIG. 9 is a plan view showing the second embodiment of the present invention;

FIG. 10 is a cross sectional view taken along the line 10 – 10 of Fig. 9 showing the first embodiment of the present invention;

25 FIG. 11 is an explanation view showing the way in which a loading hook with hooked rod only is used showing the second embodiment of the present invention;

FIG. 12 is an explanation view showing the way in which an inclined hook is used

showing the second embodiment of the present invention;

FIG. 13 is a side view showing a third embodiment of the present invention;

FIG. 14 is a plan view showing the third embodiment of the present invention;

FIG. 15 is a cross sectional view taken along the line 15 – 15 of Fig. 14 showing the  
5 third embodiment of the present invention;

FIG. 16 is an explanation view showing the way in which a shock-absorbing member is attached showing the third embodiment of the present invention;

FIG. 17 is a side view showing a fourth embodiment of the present invention;

FIG. 18 is a plan view showing the fourth embodiment of the present invention;

10 FIG. 19 is a cross sectional view taken along the line 19 – 19 of Fig. 18 showing the fourth embodiment of the present invention;

FIG. 20 is a side view showing a fifth embodiment of the present invention;

FIG. 21 is a plan view of a shock-absorbing member showing the fifth embodiment of the present invention;

15 FIG. 22 is a cross sectional view taken along the line 22 – 22 of Fig. 21 showing the fifth embodiment of the present invention;

FIG. 23 is a cross sectional view taken along the line 23 – 23 of Fig. 21 showing the fifth embodiment of the present invention;

FIG. 24 is a side view showing a sixth embodiment of the present invention; and

20 FIG. 25 is a plan view showing the sixth embodiment of the present invention.

### **DETAILED DESCRIPTION**

Preferred embodiments of the present invention are described in more detail below referring to the accompanying drawings.

25 An understanding of the present invention may be best gained by reference Figs. 1 to 7. The reference numeral 1 designates a loading hook for commercial goods attached in a goods-exhibition implement 2 including attachments bar for goods exhibition, lattice,

nets, showcases, hook stands and hook hangers. The loading hook 1 for commercial goods, which includes an attachment piece 3 attached to the goods exhibition implement 2 and a loading hook body 14 having a support rod 4 and a hook rod 5 which are attached fixedly in parallel at the upper and lower sides thereof, is further comprised of a buffer member 9.

5 The buffer member is further comprised of an attachment part 6 and a buffer body 8. The attachment part 6 is attached detachably to the support rod 4 and is made from synthetic resin material with translucent or transparent and with elasticity such as natural resin, polypropylene, Styrenic-Block-Copolymers, EVA resin, PET, synthetic resin with thermoplastic elastomer and biodegradable plastic. The buffer part 8 is made from the  
10 same quality of the material as the attachment part and is formed in the shape of a plate, forming at the end part of the attachment part 6 fixedly. The buffer part 8 also has a buffer part 7 which is formed in the shape of a tongue and curves downward so that a tip part of the hook rod 5 is covered.

The attachment part 6 is further comprised of an attachment part body 10, an  
15 engaged part 11 and an engaged support part 12. The attachment part body 10 is formed in the shape of a square. The engaged part 11 is formed in the part attachment part body 10 which engages with the hook part 5. The engaged support part 12 is fixed with one of adhesion, deposition, fixation and engagement to the inner surface of the engaged part 11, preventing to move forward and backward when the hook rod 5 engages therewith.

20 For the loading hook 1 for commercial goods of the above-mentioned composition, the packages for goods is hooked on or put in the hook rod 5 after the attachment piece 3 is attached to the goods-exhibition implement 2 for goods exhibition including attachments bar, lattice, nets and showcases which are arranged at the shops from the upper direction. Moreover, when the display board 13 is attached, the kinds of goods, bar code, etc. of the  
25 corresponding goods are displayed on it. In addition, the plurality of the loading hooks 1 for commercial goods are attached in the goods exhibition implement 2, and then goods are displayed.

When the buffer member is attached, as shown in Fig. 7, the engaged part 11 of the attachment part body 10 is pushed in the support rod 4 from the lower direction so as to cover the tip part of the hook rod with the buffer part 7 of the buffer member 9. Therefore, since the engaged part 11 sticks to the support rod 4 by the engaged support part 12, the forward and backward movement is controlled. In this case, the high buffer effect is produced between the tip part of the hook rod 5 and the buffer member 9, and the buffer member 9 is attached so as to have the required space which goods is put and picked out.

Therefore, since the buffer member 9 covers the tip part of the hook rod 5, the loading hook 1 for commercial goods can be efficiently prevented to injure the purchase visitors and visitors when they hit the tip part of the hook rod 5 with shopping, walking and the like and to injure their eyes and faces when they bring their eyes and faces close to the hook rod 5. In addition, since the required space is formed suitably between the tip part of the hook rod 5 and the buffer member 9, goods can be easily taken in and out in the state of preventing an injury etc.

In addition, the attachment part 6 and buffer member 9 in this embodiment are formed of the translucent or transparent synthetic resin material. In addition, the synthetic resin material that is mixed the coloring agent, additive, etc. may be used.

Moreover, a part which hits the tip part of the hook rod of the buffer member 9 may be formed the thick buffer part for reinforcement. Furthermore, an arc-shaped reinforcement member for reinforcement may be formed in both side parts of the curved part of the buffer member 9.

## OTHER EMBODIMENTS

Other embodiments of the present invention will now be described referring to Figs. 8 to 25. Through the drawings of the embodiments, like components are denoted by like numerals as of the first embodiment and will not be further explained in great detail.

A second embodiment of the present invention is shown in Figs. 8 to 12. It is

distinguished from the first embodiment by the fact that an attachment part 6A with suitable height is attached to an upper part of the hook rod 5, and the buffer part 7 of the buffer body 8 is formed in the shape of the tongue and curved upward so as to cover the tip part of the hook rod 5. The loading hook 1A for commercial goods with a buffer member  
5 9A according to the second embodiment has similar advantages to that according to the first embodiment.

In addition, since goods is hooked to the hook rod 5, an attachment part 6A is attached to a part adjacent the attachment piece 3, and the loading hook body 14 having the support rod 4 and hook rod 5 is explained in this embodiment. Moreover, a loading hook  
10 1B for commercial goods with a loading hook body 14A having only the hook rod 5 as shown in Fig. 11 may be used. Furthermore, as shown in Fig. 12, it may be attached to the lower part of the hook rod 5 so as to cover the tip part of the hook part 5. In this case, it may be used for the oblique hook, oblique hanger and the like.

A third embodiment of the present invention is shown in Figs. 13 to 16. It is  
15 distinguished from the first embodiment by the fact that the attachment part 6 is replaced from another attachment part 6B and the buffer body 8 is replaced from another buffer body 8A. The attachment part 6B includes an engaged hole which is formed at the opposite surface of the engaged part 11. The buffer body 8A includes an engagement piece 16 which is formed at an end part thereof, engaging with the engaged hole 15 of the  
20 attachment part 6B. The loading hook 1C for commercial goods with the attachment part 6B and a buffer member 9B according to the third embodiment has similar advantages to that according to the first embodiment.

In addition, the buffer member 9B is attached rotatably to the attachment part 6B, rotating to the right and left directions. In this embodiment, the attachment part 6B is made  
25 of synthetic resin material, and the attachment part 6B may be made of metal material because it is attached to the support rod 4 and hook rod 5 only.

Moreover, the end part of the buffer body 8 may insert into the engaged hole 15 of

the attachment part 6B to the horizontal direction.

A fourth embodiment of the present invention is shown in Figs. 17 to 19. It is distinguished from the first embodiment by the fact that the attachment part body 10 is replaced from another attachment part body 10A, capable of attaching to the lower part of the display board 13. The loading hook 1D for commercial goods with an attachment part 6C according to the fourth embodiment has similar advantages to that according to the first embodiment.

A fifth embodiment of the present invention is shown in Figs. 20 to 23. It is distinguished from the first embodiment by the fact that the attachment part 6 is replaced from another attachment part 6D and the buffer member 9 is replaced from another buffer member 9C. The attachment part 6D is comprised of an attachment part body 10B which engages so as to cover the outer circumferential surface of the hook rod 5, forming in the shape of a sleeve and the engaged support part 12 which is attached to the inner surface of the attachment part body 10B. The buffer member 9C, which is attached to the end part of the attachment part 6D, includes a buffer body 8B which further includes a buffer part 7A and a fitting part 17. The buffer part 7A is formed in the shape of a miniature bulb so as to cover the tip part of the hook rod 5. The fitting part 17 is formed in the shape of a concavity and formed inner portion of the buffer part 7A, fitting the tip part of the hook rod 5. The loading hook 1E for commercial goods according to the fifth embodiment has similar advantages to that according to the first embodiment.

A sixth embodiment of the present invention is shown in Figs. 24 and 25. It is distinguished from the second embodiment by the fact that a pair of attachment part bodies 10C, 10C is attached to the upper part of a hook rod 5A which is attached to the attachment piece 3, and a buffer body 8C includes a buffer part 7B with width so as to cover the tip part of the hook rod 5A. The loading hook 1F for commercial goods with a buffer member 9D according to the sixth embodiment has similar advantages to that according to the second embodiment.

As set forth above, the advantages of the invention are as follows:

(1) Since the loading hook for commercial goods including an attachment piece attached to the goods exhibition implement and a support rod and/or a hook rod which are attached to the attachment piece, includes a buffer member which includes an attachment  
5 part which is attached detachably to the support rod; and a buffer body which is provided an end part of the attachment part, having a buffer part so that a tip part of the hook rod is covered, the tip part of the hook rod is covered certainly.

Therefore, it can be efficiently prevented to injure the purchase visitors and visitors when they hit the tip part of the hook rod with shopping, walking and the like.

10 In addition, it can be efficiently prevented to injure their eyes and faces when they bring their eyes and faces close to the hook rod.

(2) As discussed above, goods can be easily taken in and out in the state of preventing an injury etc.

(3) As discussed above, since it can be used even though the length or shape of the  
15 hook rod is changed, it can be used in the display place which turns child's eyes.

(4) As discussed above, since it has a simple structure, it is easy to arrange similarly as usual in the best condition.

(5) Claims 2 to 4 achieve the same effect of the above-mentioned (1) to (4).

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## **INDUSTRIAL APPLICABILITY**

The present invention is used in the market, business world and the like which is manufactured, used and sold.